Commonwealth of Kentucky
Division for Air Quality

DRAFT PERMIT STATEMENT OF BASIS

TITLE V/SYNTHETIC MINOR DRAFT NO. V-03-020(REVISION 2)
NEWPORT STEEL CORPORATION
NEWPORT, KY.
MARCH 3, 2006
RITA ARGUELLO, REVIEWER
PLANT I.D. # 21-037-00006
APPLICATION LOG # APE20050003

SOURCE DESCRIPTION:

Newport Steel Corporation (hereby referred to as NSC) is a steel pipe manufacturer located in Wilder, Kentucky. This plant manufactures coated steel pipes. In February of 1998 NSC sent an application to replace the three existing electric arc furnaces (EAF) with a modern EAF and to increase annual steel production. Under that process, scrap was melted in the EAF, tapped, sent for further refining in the existing LMF followed by casting in the existing continuous caster.

In March 2001 this Melt Shop operation shutdown, which involved four significant emission units: EAF(Source 12(1), LMF (Source 13(-), Continuous Caster (Source 04(3) and the Reheat Furnace (Source 03(5).

The permanent shut down of the melt shop changed the NSC's Source Identification Classification (SIC) category from SIC# 3312 (Steel Works, Blast Furnaces and Rolling) to SIC #3317 (Steel Pipe and Tubes) in 2004.

The processes that remain in operation at the facility are the 8" and 16" Pipe Mills. NSC purchases high quality hot rolled steel coils. The manufacturing process begins by feeding these steel coils into the material handling equipment of either the 8" or 16" Pipe Mill where they are cold-formed into a tubular configuration. The resultant tube is in-line welded by a high frequency electric resistance welder and cut into designated lengths. The pipe is inspected, tested, and coated with a varnish if required. Welded tubular products range in size from 4.5 to 16.0 inches in outside diameter.

A draft permit was issued, and a public notice was placed in the Kentucky-Community on June 5, 2003. The public comment period expired on July 7, 2003. No comments were received from the public or affected states but comments were received from the applicant (See *Response to Comments* for comments from NSC and the Division's response). A proposed permit was issued on December 4, 2003.

Revision 2:

In November of 2005, NSC requested a new modification of the permit with a request to increase the VOC emission limit at the 16-inch pipe coating line. This will provide the plant operational flexibility by product mix (i.e., the ability to produce additional pipes requiring coating) and operating hours. There are no equipment modifications or replacements associated with this operation.

NSC performed a VOC netting analysis on the last five year of operation. Increase of the allowable

VOC limitation at the 16-inch pipe coating line, from its current limit of 38.7 tons per year to 76.1 tons per year will be offset as a result of the Melt Shop shutdown operation.

Revision 1:

Since the June 14, 2004, application was received after the proposed permit had been issued and since that application did not constitute a significant revision to the proposed permit, the permit issued was revised based on the 2004 application and was considered as the final permit.

In conclusion, an analysis has been made of all relevant information available, which pertains to this application. The Division has concluded that the source will comply with all applicable air quality regulations and requirements. Compliance with the terms of the permit will ensure compliance with all air quality requirements. Therefore, it is the Division's proposed/final determination that a Title V/Synthetic Minor permit should be issued as conditioned.

SOURCE-WIDE REGULATORY APPLICABILITY

Based on their criteria air pollutants emissions, the plant requires a Title V permit. This facility is currently located in an ozone non-attainment area; all existing units were either constructed when the area was attainment or were constructed under NSR as applicable.

UNITS REGULATORY APPLICABILITY

SOURCE DESCRIPTION:
Emission Point #8: Continuous steel pipe coating using a clear coat lacquer to coat pipes between 4" and 8" diameter, with a maximum usage of 50,000 gallons of clear coat per year. Potential criteria air pollutants emissions (PTE) were calculated based on the maximum usage rate of 50,000 gallons, which NSC provided.

COMMENTS:
No specific control equipment is required to be used at this point. However, the VOC content of the coating used is required to be below 4.3 lbs per gallon. The only applicable regulation is 401 KAR 61:132, Existing miscellaneous metal parts and products surface coating operations. However, the control equipment requirements of this regulation are not required as long as only exempt clear coat, with a VOC content below 4.3 lbs/gal, is used.

SOURCE DESCRIPTION:
Emission Point #9: Continuous steel pipe coating using a clear coat lacquer to coat pipes between 4" and 16" diameter, with a maximum usage of 18,000 gallons of clear coat per year.

COMMENTS:
The control equipment is required to be used at this point to recover a percentage of VOC as claimed in the VOC netting calculations. The VOC content of the coating used is required to be below 4.3 lbs per gallon. The applicable regulation is 401 KAR 59:225, New miscellaneous metal parts and products surface coating operations. However, the control requirements of this regulation are not required as long as only exempt clear coat, with a VOC content below 4.3 lbs/gal, is used.

The permit had required the emissions from this point to stay below 38.7 tons per year to preclude the construction of this unit from being consider a major modification to a major source in a nonattainment area. However due to the VOC netting exercise, an increase in the current VOC emission limit to 76.1 tons per year is allowed.

SOURCE DESCRIPTION:
Emission Point #10: Onsite landfill used for industrial waste.

COMMENTS:
Only fugitive particulate emissions are generated at this point. The only requirement for this activity is that the dust emissions be kept to a minimum and that no household garbage be included in the landfill. Emission factors used were based on numbers presented by the company and the SCC units used are tons of slag processed.

SOURCE DESCRIPTION:
Emissions Point #11: Haul roads, paved and unpaved.

COMMENTS:
Only fugitive particulate emissions are generated at this point. The only requirement for this point is that the dust emissions be kept to a minimum through the watering of unpaved roads and keeping paved roads clean. Emission factors used were based on numbers presented by the company and the SCC units used are tons of steel produced, since the road usage will depend on the production rate of the plant.

SOURCE DESCRIPTION:
Emission Point #14: Parts Washers (12).

COMMENTS:
To prevent the applicability of the control requirements per 401 KAR 61:095, the following conditions shall be satisfied for these units:

- The cold cleaner shall have a remote solvent reservoir.
- The solvent used in the cold cleaner shall not have a vapor pressure that exceeds 33 mm Hg measured at 100^{o}F.
- The cold cleaner solvent shall not be heated above 120^{o}F.
- The sink-like work area shall have an open drain area less than 100 sq. cm.
- Evidence shall be provided that waste solvent shall be stored properly and disposed of with minimal loss due to evaporation.

SOURCE DESCRIPTION:
Emission point #15: Cooling towers (2)

COMMENTS:
No chromium-based water treatment chemicals shall be used in the industrial process cooling towers.

EMISSION AND OPERATING CAPS DESCRIPTION:
See comment of each source description.

CREDIBLE EVIDENCE:
This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.